AMENDMENTS

Please amend the application as follows:

Amendments to the Claims:

Please cancel pending claims 1-30 and 51-76 without prejudice.

Claims 31-50 are withdrawn.

Please add and consider the following newly added claims 77-104.

77. (Newly Added) A method of providing a resistive heater, having a substrate, a resistive heating layer, and a power source, comprising the steps of:

determining a desired resistivity of said resistive heater layer;

selecting a metallic component and at least one reactant gas;

selecting a proportion of said metallic component and said at least one reactant gas, so that when combined said desired resistivity of said resistive heater layer results;

promoting reaction of said metallic component and said reactant gas, thereby combining said metallic component and said reactant gas, resulting in a free metal and reaction product;

depositing said combined free metal and reaction product on said substrate to form said resistive heater layer having said desired resistivity; and

providing power to said resistive heater layer.

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78. (Newly Added) The method of claim 77, wherein said reaction product is one or more oxide, nitride, carbide, and/or boride derivatives of said metallic component.

79. (Newly Added) The method of claim 77, wherein said reactant gas comprises one or more of oxygen, nitrogen, carbon, and boron.

80. (Newly Added) The method of claim 77, wherein said step of promoting reaction of said metallic component and said reactant gas further comprises the steps of:

melting said metallic component to produce a stream of molten droplets; and

flowing said at least one reactant gas over said molten droplets, thereby resulting in said reaction of said metallic component and said reactant gas.

81. (Newly Added) The method of claim 77, further comprising the step of providing an electrically insulating layer between said substrate and said resistive layer.

82. (Newly Added) The method of claim 81, further comprising the step of providing an adhesion layer between said insulating layer and said substrate.

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83. (Newly Added) The method of claim 82, wherein said adhesion layer comprises nickel-chrome alloy or nickel-chrome-aluminum-yttrium alloy.

84. (Newly Added) The method of claim 77, further comprising the step of providing a heat reflective layer between said resistive heater layer and said substrate.

85. (Newly Added) The method of claim 84, wherein said heat reflective layer comprises zirconium oxide.

86. (Newly Added) The method of claim 77, further comprising the step of providing a ceramic layer superficial to said resistive heater layer.

87. (Newly Added) The method of claim 86, wherein said ceramic layer comprises aluminum oxide.

88. (Newly Added) The method of claim 77, further comprising the step of providing a metallic layer superficial to said resistive heating layer.

89. (Newly Added) The method of claim 88, wherein said metallic layer comprises molybdenum or tungsten.

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90. (Newly Added) The method of claim 77, wherein said metallic component is titanium (Ti), silicon (Si), aluminum (Al), zirconium (Zr), cobalt (Co), nickel (Ni), iron (Fe), or alloys thereof.

91. (Newly Added) The method of claim 77, wherein said reaction product is one or more nitride, carbide, and/or boride derivatives of said metallic component.

92. (Newly Added) The method of claim 77, wherein said reaction product is two or more oxide, nitride, carbide, and/or boride derivatives of said metallic component.

93. (Newly Added) A resistive heater, comprising:

a resistive layer having a controlled resistivity, said resistive layer further comprising a metallic component and one or more reaction products, resistivity of said resistive layer being a combined resistivity of said metallic component and said one or more reaction products, resistivity of said reaction products being controlled by composition of a reactant gas and said metallic component that are combined to create said resistive layer; and

a power source coupled to said resistive layer.

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94 (Newly Added) The resistive heater of claim 93, wherein said reaction product is one or more oxide, nitride, carbide, and/or boride derivatives of said metallic component.

95. (Newly Added) The resistive heater of claim 93, wherein said reactant gas comprises one or more of oxygen, nitrogen, carbon, and boron.

96. (Newly Added) The resistive heater of claim 93, further comprising an electrically insulating layer located between said substrate and said resistive layer.

97. (Newly Added) The resistive heater of claim 96, further comprising an adhesion layer located between said insulating layer and said substrate.

98. (Newly Added) The resistive heater of claim 97, wherein said adhesion layer comprises nickel-chrome alloy or nickel-chrome-aluminum-yttrium alloy.

99. (Newly Added) The resistive heater of claim 93, further comprising a heat reflective layer located between said resistive layer and said substrate.

100. (Newly Added) The resistive heater of claim 99, wherein said heat reflective layer comprises zirconium oxide.

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101. (Newly Added) The resistive heater of claim 93, further comprising a ceramic layer superficial to said resistive layer.

102. (Newly Added) The resistive heater of claim 101, wherein said ceramic layer comprises aluminum oxide.

103. (Newly Added) The resistive heater of claim 93, further comprising a metallic layer superficial to said resistive layer.

104. (Newly Added) The resistive heater of claim 103, wherein said metallic layer comprises molybdenum or tungsten.

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